

IN THE CLAIMS:

Please amend the claims as follows:

1. (Currently Amended) A material capable of luminescence comprising:
a polymer or oligomer; and
an organometallic group
~~characterised in that~~ wherein the polymer or oligomer is at least partially
conjugated and the organometallic group is covalently bound to the polymer or
oligomer and at least one of the nature, location ~~and/or, and~~ proportion of the polymer
or oligomer and of the organometallic group in the material ~~are~~ is selected so that the
luminescence predominantly is phosphorescence.
2. (Original) A material according to claim 1, wherein the polymer or
oligomer is linear.
3. (Currently Amended) A material according to claim 1 ~~or claim 2~~,
comprising more than one organometallic group.
4. (Currently Amended) A material according to ~~any one of the~~
~~preceding claims~~ claim 1, wherein triplet energy level of the organometallic group is
lower than the corresponding singlet and triplet energy levels of the polymer or
oligomer.
5. (Currently Amended) A material according to ~~any one of the~~
~~preceding claims~~ claim 1, wherein the luminescence is electroluminescence.

6. (Currently Amended) A material according to ~~any one of the preceding claims~~ claim 1, wherein the organometallic is conjugatively bound to the polymer or oligomer.

7. (Currently Amended) A material according to ~~any one of the preceding claims~~ claim 1, wherein the polymer or oligomer is semiconducting.

8. (Currently Amended) A material according to claim 7, wherein the polymer or oligomer is capable predominately of fluorescence in the absence of the organometallic group.

9. (Original) A material according to claim 8, wherein the polymer or oligomer comprises an aryl or heteroaryl repeat unit.

10. (Currently Amended) A material according to claim 9, wherein the aryl or heteroaryl repeat unit comprises a group selected from the group consisting of 2,7-linked 9,9 disubstituted ~~fluorene~~ fluorenes, [a] p-linked dialkyl ~~phenylene~~ phenylenes, [a] p-linked disubstituted ~~phenylene~~ phenylenes, [a] phenylene ~~vinylene~~ vinylenes, [a] 2,5-linked ~~benzothiadiazole~~ benzothiadiazoles, [a] 2,5-linked substituted ~~benzothiadiazole~~ benzothiadiazoles, [a] 2,5-linked disubstituted ~~benzothiadiazole~~ benzothiadiazoles, [a] 2,5-linked substituted or unsubstituted ~~thiophene~~ thiophenes ~~or a, and triarylamine~~ triarylamines.

11. (Currently Amended) A material according to ~~any one of the preceding claims~~ claim 1, wherein the organometallic group contains a transition metal.

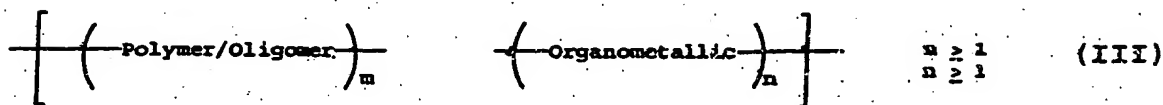
12. (Currently Amended) A material according to claim 11, wherein organometallic group contains a precious metal.

13. (Currently Amended) A material according to ~~any one of the preceding claims~~ claim 1, wherein the material comprises the organometallic group in an amount in the range from 1 to 10 % by weight.

14. (Currently Amended) A material according to ~~any one of the preceding claims~~ claim 1, wherein the organometallic group is pendent from the backbone of the polymer or oligomer.

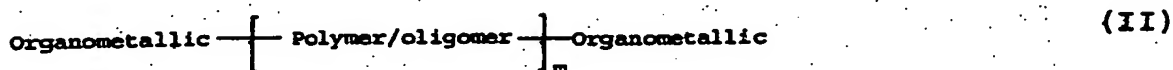
15. (Currently Amended) A material according to ~~any one of claims claim 1 to 13~~, wherein the organometallic group forms a part of the backbone of the polymer or oligomer.

16. (Currently Amended) A material according to claim 15, having the general formula III:



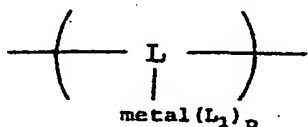
17. (Currently Amended) A material according to claim 15, wherein the organometallic group is located at the end of the polymer or oligomer backbone.

18. (Currently Amended) A material according to claim 17, having the general formula II:



where $m \geq 1$

19. (Currently Amended) A material according to ~~any one of claims~~ claim 15 ~~to 18~~, wherein the organometallic group has the structure:



where L is a ligand and each L_1 is a further ligand which may be the same or different from one another and p is a number suitable to satisfy the valency of the metal.

20. (Currently Amended) A material according to ~~any one of claims~~ claim 15 ~~to 17~~, wherein the organometallic group contains an aryl or heteroaryl group.

21. (Currently Amended) A material according to claim 20, wherein the aryl or heteroaryl group comprises a group selected from the group consisting of 2,7-linked 9,9 disubstituted ~~fluorine~~ fluorines, [a] p-linked dialkyl ~~phenylene~~ phenylenes, [a] p-linked disubstituted ~~phenylene~~ phenylenes, [a] phenylene ~~vinylene~~ vinylenes, [a] 2,5-linked ~~benzothiadiazole~~ benzothiadiazoles, [a] 2,5-linked substituted ~~benzothiadiazole~~ benzothiadiazoles, [a] 2,5-linked disubstituted ~~benzothiadiazole~~ benzothiadiazoles, [a] 2,5-linked substituted or unsubstituted ~~thiophene~~ thiophenes or a, and triarylamines triarylaminines.

22. (Canceled)

23. (Canceled)

24. (Currently Amended) An optical device or a component therefor, which comprises a substrate and a material as defined ~~in any one of claims~~ claim 1 to 24 supported on the substrate.

25. (Original) An optical device or a component therefor according to claim 24, wherein the optical device comprises an electroluminescent device.

26. (Currently Amended) An optical device according to claim 25, wherein the electroluminescent device comprises:

a first charge carrier injecting layer for injecting positive charge carriers;

a second charge carrier injecting layer for injecting negative charge carriers;

and

a light-emissive layer located between the charge carrier injecting layers for generating light and comprising a material as defined in ~~any one of claims~~ claim 1 to 21.

27. (Currently Amended) A monomer for use in a polymerisation reaction having a general formula as shown in IV or V below:



where the organometallic in formula V includes a carbon-metal bond; X and X' each is a reactive ~~groups~~ group independently selected from the group consisting of [a] halide ~~group~~ groups, [a] boronic acid ~~group~~ groups, [a] boronic ester ~~group~~ groups and [a] borane ~~group~~ groups; $p \geq 0$; M is a group comprising an aryl or heteroaryl group and L is a ligand capable of forming a complex with a metal when treated with a metal complexing reagent, ~~preferably the organometallic does not comprise Ru.~~

28. (Currently Amended) An end-capping reagent for use in a polymerisation reaction having a general formula as shown in formula X or XI:



where L is a ligand capable of forming a complex with a metal when treated with a metal-complexing reagent; X is a reactive group selected from the group consisting of [a] halide group groups, [a] boronic acid group groups, [a] boronic ester group groups and [a] borane group groups; and where X is a reactive halide group in formula XI then X is bound to a ligand of the organometallic.

29. (Currently Amended) A process for preparing a material as defined in claim 17 ~~or claim 18~~, which comprises:

- (a) reacting monomers to form a polymer or oligomer wherein each monomer has at least two reactive groups selected from the group consisting of [a] halide group groups, [a] boronic acid group groups, [a] boronic ester group groups and [a] borane group groups and each monomer comprises an aryl or heteroaryl group; and
- (b) terminating the polymer or oligomer formed in step (a) using an end-capping reagent, said end-capping reagent comprising one reactive group selected from the group consisting of [a] halide group groups, [a] boronic acid group groups, [a] boronic ester group groups and [a] borane group groups and either (i) containing

an organometallic ~~as defined in claim 1 or claim 9~~ or (ii) being capable of forming a complex with a metal when treated with a metal-complexing reagent; and

(c) where the end-capping reagent is as defined in (ii), treating the terminated polymer or oligomer from step (b) with a metal-complexing reagent.

30. (Currently Amended) A process for preparing a material as defined in ~~any one of claims~~ claim 1 to 16, which includes reacting at least one first monomer with a plurality of second monomers which are different to the first monomer to form a polymer or oligomer;

wherein each monomer comprises an aryl or heteroaryl group and has at least two reactive groups selected from the group consisting of [a] halide ~~group groups~~, [a] boronic acid ~~group groups~~, [a] boronic ester ~~group groups~~ and [a] borane ~~group groups~~; and wherein the first monomer either (i) contains an organometallic or (ii) is capable of forming a complex with a metal when treated with a metal-complexing reagent; and

(c) where the first monomer is as defined in (ii), treating the polymer or oligomer from step (b) with a metal-complexing reagent.

31. (New) Monomer of claim 27 wherein the organometallic does not comprise Ru.